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TITLE: Watershed method for controlling cashflow mapping in value at risk

determination

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PRIOR-ART-DISCLOSED:

### U.S. PATENT DOCUMENTS

Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
	5101353	March 1992	Lupien et al.	705/37
	5446885	August 1995	Moore et al.	395/600
	5742775	April 1998	King	705/37
	5761442	June 1998	Barr et al.	705/35
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	5819237	October 1998	Garman	705/36
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Search Selected

## FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO PUBN-DATE COUNTRY US-CL 0 401 203 December 1990 EP WO 96/30850 WO

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ART-UNIT: 275

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#### ABSTRACT:

A system, computer implemented method, and software product provide for the correct allocation of cashflows to enable accurate determination of value at risk with respect to income and balance sheet risk for transactions portfolio including transactions occurring in different fiscal periods. The computer implemented method includes establishing watershed variables, such as watershed dates, and partitioning both cashflows derived from the transaction portfolio and the vertex set of market risk data into distinct subsets. The partitioned cashflows are allocated, using a regular allocation function, onto individual ones of the partitioned vertex sets. The partitioning and allocation correctly segregate cashflows with respect to the fiscal periods to which they contribute to the value at risk. The allocated cashflows are then each separately treated by a value at risk computation. A system includes a computer, database of transactions, networked or local access to market risk data, and a software product executing the computer implemented method. The software product may include a module for shredding transactions into cashflows, a module for partitioning the cashflows and vertex sets, a module for performing the regular allocation of partitioned cashflows, a module for performing the value at risk computations.

9 Claims, 4 Drawing figures